



Illinois Environmental Protection Agency

Supplemental Form

Air Pollution Control Equipment – Afterburner

Illinois Environmental Protection Agency
Bureau of Air – Permit Section (MC 11)
2520 West Iles Ave
P.O. Box 19276
Springfield, IL 62794-9276

Date Form Received

Data and Information

Flow Diagram Designation of Afterburner: _____

Fuel Used in Burners:

Natural Gas

Fuel Oil; Number: _____

Other (Specify): _____

Burners Per Afterburner: _____ at _____ (million Btu/hr, each)

Minimum Combustion Chamber Temperature (Degrees Fahrenheit): _____

Is a Catalyst Used? Yes No

If Yes, Catalyst Material: _____

Expected Frequency of Catalyst Replacement: _____

Date Catalyst Was Last Replaced (month/year): _____

Explain degradation or performance indicator criteria determining catalyst replacement:

If a heat exchanger is used, describe:

Heat Exchanger Surface Area (sqft): _____

Average Thermal Efficiency (%): _____

Describe method of gas mixing used:

Range of Retention Time (sec): _____ to _____

Combustion Chamber Length (feet): _____

Combustion Chamber Cross Sectional Area (sqft): _____

The Illinois EPA is authorized to require, and you must disclose, the requested information on this form pursuant to the Environmental Protection Act (“Act”), 415 ILCS 5/1 et seq., and its implementing regulations. This information shall be provided using either this form or in an alternative manner at your discretion. Failure to disclose the information may result in an incomplete application and other penalties as provided for in the Act, 415 ILCS 5/42-45. Intentional falsification of the information in this form may result in significant criminal and civil penalties as provided by law.

Inlet Emission Stream Parameters

Parameter	Maximum	Typical
Pressure (mmHg)		
Heat content (Btu/scf)		
Oxygen content (%)		
Moisture content (%)		

Are Halogenated Organics Present: Yes No

Are Particulates Present: Yes No

Are Metals Present: Yes No

Afterburner Operating Parameters

Operating Parameter	During Maximum Operation of Feeding Unit(s)	During Typical Operation of Feeding Unit(s)
Combustion Chamber Temperature (degrees Fahrenheit)		
Inlet Gas Temperature (degrees Fahrenheit)		
Inlet Flow Rate (scfm)		
Efficiency, VOM Reduction (%)		
Efficiency, other contaminant _____ (%)		

Afterburner Monitoring and Recordkeeping

For thermal afterburners, is the combustion chamber temperature continuously monitored and recorded? Yes No

For catalytic afterburners, is the temperature rise across the catalyst bed continuously monitored and recorded? Yes No

Is the VOM concentration of exhaust monitored and recorded? Yes No

Is the operation of the afterburner discontinued during the nonozone season (September 1 to May 31)? Yes No

Parameter to be Monitored (e.g. flow rate)		
Method of Measurement		
Unit of Measurement		
The Monitoring Frequency		
Description of the Location of each Monitor		
Verification Procedures to Confirm the Operational Status of the Monitoring		
Method of Recordkeeping (e.g. data logger, manual readings)		

If each monitor is not operated at all times the control equipment is in operation, explain:

Provide information on the most recent tests, if any. If additional space is needed, attach and label as exhibit 260B-1:

Test Date	Test Method	Testing Company	Operating Conditions	Summary of Results

Describe all reporting requirements and provide the title and frequency of report submittals to the Agency: